

# **Comp 125 - Visual Information Processing**

---

Spring Semester 2019 - Week 5 - Monday

Dr Nick Hayward

## HTML Basics - <body> - part 2

---

### linking

- linking is an inevitable part of web design and HTML usage
- can be considered within three different contexts
  - *linking to an external site*
  - *linking to another page within the same site*
  - *linking different parts of the same page*
- add links to text and images within the HTML
- <a> element for links plus required attributes, e.g.

```
<!-- external link -->
<a href="http://www.google.com/">Google</a>
<!-- email link -->
<a href="mailto:name@email.com">Email</a>
<!-- internal page link -->
<a href="another_page.html">another page</a>
<!-- define internal anchor - using name attribute -->
<a name="anchor">Internal anchor</a>
<!-- define internal anchor - using ID attribute -->
<a id="anchor">Anchor</a>
<!-- internal anchor link -->
<a href="#anchor">Visit internal anchor</a>
<!-- internal anchor link on another page -->
<a href="/another_page.html#anchor">Visit internal anchor</a>
<!-- internal anchor link on a page on an external site -->
<a href="https://www.test.com/test.html#anchor">Visit internal anchor on external site</a>
```

- Demo - HTML - Internal Anchor

## HTML Basics - <body> - part 3

---

### linking - cont'd

- standard attributes supported by <a> element include
  - *class, id, lang, style, title...*
- optional attributes are available for <a> element including
  - *target, href, name...*
- target attribute specifies where the link will be opened relative to the current browser window
- possible attribute values include

```
<!-- open link in new window or tab -->
_blank
<!-- same frame -->
_self
<!-- open within parent frameset -->
_parent
<!-- open in the same window -->
_top
```

## Video - Hyperlinks

---

How the hyperlink changed everything | Small Thing Big Ide...



Source - YouTube - How the hyperlink changed everything

## HTML Basics - <body> - part 4

---

### images

- `<img>` allows us to embed an image within a web page
- `<img>` element requires a minimum `src` attribute

```


```

- other optional attributes include
  - *class, id, alt, title, width, height...*
- use images as links
- image maps

```
<map name="textmap">
  <area shape="rect" coords="..." alt="Quote 1" href="notes1.html" />
</map>
```

## HTML Basics - <body> - part 5

---

### tables

- organise data within a table starting with the <table> element
- three primary child elements include
  - *table row, table header, table data*
  - <tr>, <th>, <td>

```
<table>
  <caption>424 - basic test table</caption>
  <tr>
    <th>heading 1</th>
    <th>heading 2</th>
  </tr>
  <tr>
    <td>row 1, cell 1</td>
    <td>row 2, cell 2</td>
  </tr>
</table>
```

- also add a <caption>
- span multiple columns using the colspan attribute
- span multiple rows using the rowspan attribute

## HTML Basics - <body> - part 6

---

### lists

- unordered list <ul>, ordered list <ol>, definition list <dl>
- <ul> and <ol> contains list items <li>

```
<ul>
  <li>...</li>
</ul>
```

```
<ol>
  <li></li>
</ol>
```

- definition list uses <dt> for the item, and <dd> for the definition

```
<dl>
  <dt>Game 1</dt>
  <dd>our definition</dd>
</dl>
```

## HTML Basics - <body> - part 7

---

### forms

- used to capture data input by a user, which can then be processed by the server
- <form> element acts as the parent wrapper for a form
- <input> element for user input includes options using the *type* attribute
  - *text, password, radio, checkbox, submit*

```
<form>  
  Text field: <input type="text" name="textfield" />  
</form>
```

- process forms using
  - e.g. *JavaScript...*



# HTML & JavaScript - embed JavaScript

---

- start by embedding JavaScript in HTML
  - *add a `<script>` element to the HTML document*

```
<script>  
var title = "Welcome to Castalia...";  
console.log(title);  
</script>
```

- in a browser's console
  - *each line would be executed with Return keypress*
  - *in a HTML file*
  - *JS run from top to bottom at one time*
  - *console.log - value will be output to browser's console*

## References

---

- [W3Schools - HTML Form Attributes](#)
- [W3Schools - HTML Form Elements](#)
- [W3Schools - Math object](#)